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July 14, 2004

Mr. John Wachtler
Minnesota Environmental Quality Board
658 Cedar Street, Room 300
St. Paul, MN 55155

RE: Xcel Energy's Application to the Minnesota Environmental Quality Board for a Route Permit from the Minnesota Environmental Quality Board for a 345 kV Transmission Line from the Split Rock Substation near Brandon, South Dakota to the Lakefield Junction Substation near Lakefield, Minnesota, a new Nobles County Substation near Reading, Minnesota and a 115 kV Transmission Line from the new Nobles County Substation to the Chanarambie Substation near Lake Wilson, Minnesota
MEQB DOCKET NO. 03-73-TR-XCEL
Data Request No. 1

Dear Mr. Wachtler:

In response to your June 23, 2004 letter requesting information for the above project, Xcel Energy has the following responses.

Request No. 1.

Please provide Xcel Energy's detailed siting criteria requirements for the Nobles County Substation, in addition to the information provided in your route-permit application, including (1) total land required, (2) minimum proximity to residences, (3) relationship to potential future wind energy turbine facilities, (4) roadway access for construction, (5) availability of nearby corridors or routes for potential future high-voltage transmission line interconnections, and (6) any other relevant consideration.

The siting criteria are attached to this letter.

Request No. 2

Please provide a detailed analysis of the reliability issues regarding the potential use of the Alliant 161 kV line as a double circuit line with a new 345 kV line to the extent possible. Please describe your analysis in any quantifiable or descriptive methods available. Also please describe the current status of your discussions with Alliant Energy regarding the potential reconstruction and rebuilding of that line as a double-circuit structure.

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When reviewing potential routes for new transmission lines, Xcel Energy considers double circuiting with existing lines. It is proposed in cases where:

1. The existing line is a candidate for a rebuild due to age and condition.

2. The reliability of the system will not be compromised.

3. The additional cost of double circuiting is reasonable.

4. If another utility owns the line, they are in agreement with the proposal; and

5. There is adequate right-of-way available for a double circuit facility.

During the routing process we identified the possibility of double circuiting the new 345 kV line from Split Rock to Lakefield Junction with several existing 161 kV transmission lines. Alliant Energy owns the majority of these transmission lines. We consulted with Alliant Energy about the route proposal to double circuit with some of their lines prior to filing the application for a route permit. Alliant Energy supported using the route option with the understanding that Xcel Energy would pay for the new section of their 161 kV lines if that route were approved. Please see pages 19 and pages 105-106 of Xcel Energy's Route permit application. Alliant did not raise any concerns regarding reliability during construction so no detailed analysis was done. We also evaluated whether the higher cost to use double circuit structures and the extra time needed to tear down the existing line was reasonable. We believe that the expense to consolidate lines to minimize land use impacts is warranted. We are continuing to communicate with Alliant Energy about the project and keeping it appraised of the routing proceedings. If the route is selected, Xcel Energy will coordinate closely with Alliant Energy during the line design and construction to plan the outages to minimize risk to customers.

Request No. 3

The Nobles County Public Works Director has raised the issue of who bears the financial liability for moving any new transmission line poles due to a future county or township road expansion. Please provide Xcel Energy's normal procedures for determining whether to place transmission line poles within an existing roadway right-of-way and how the issue of potential future liability for moving the poles affects whether or how far poles are placed into adjacent yards or fields. Also, please provide a clarification of Xcel's current policy on this liability issue.

Response:

When paralleling roads and highways, Xcel Energy's general practice is to construct the poles on private easements, outside the existing public right-of-way. Xcel Energy typically acquires these easements through negotiations with the landowners and works with the landowners regarding final pole placement to minimize impacts. When determining

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placement of the poles, we take into consideration the impact of the pole on the landowner's use of the property, which generally puts the poles adjacent to the property fence. We do discuss our plans with the local jurisdiction to take into any planned road expansion projects that may impact pole placement in the future. Should the right-of-way need to be expanded in the future for new federal, state, county or township road construction and require relocation of the poles, the law would determine who is financially responsible for those costs. Current law provides for reimbursement of utility relocation costs by the government jurisdiction if the utility is required to move its facilities that are located on private easements.

Should you have any questions regarding this response, please contact me at 715-839-4661.

Sincerely,

Pam J. Rasmussen

Pamela Jo Rasmussen
Permitting Analyst

Enclosure

Nobles County Substation Siting Considerations:

1. Proximity to 345 kV transmission line route and 115 kV transmission line route:
   This can be a "chicken and egg" situation since neither of the routes has been finalized yet. The location of the lines and substation site need to be coordinated to balance the line and substation siting issues.

   Siting the substation closer to the 345 kV transmission line will avoid higher cost and siting impacts. The 115 kV transmission line route and substation site location have more flexibility. The 115 kV line interconnect should be near a logical 345 kV line route.

2. Proximity to other transmission lines that may interconnect to substation:
   The substation is planned to include a tie (in/out connection) with the existing Heron Lake (MN) to Split Rock (Brandon, SD) 161 kV line. There are no specific plans at this time for this interconnection, but the planners see it as a project that would serve to further increase the reliability of the transmission system in the region. Locating the substation near that line will reduce the amount of additional transmission lines that would need to be built into the substation.

3. Proximity to primary roads:
   Xcel Energy will need large and heavy equipment to build the substation and will place heavy equipment in the substation. Smaller roads are often not adequately rated for heavy equipment. Such roads would need to be upgraded prior to construction, or maintained during and after construction to repair damage to the road caused by heavy equipment. Access after construction will also be important for maintenance and operation since this will be a major facility on the transmission grid. Xcel Energy would prefer a substation site on a primary road or within one mile of one.

4. Minimize impacts to residences:
   The site selection should try to maximize distance from homes. This will help to reduce noise and aesthetics impacts on residences. The substation sites presented in our application were between approximately 330 feet and 1,330 feet from residences. There is no set distance, but Xcel Energy would prefer a greater distance (such as 200 feet) away from the nearest home rather than a shorter distance such as 50 feet. We will also work to design the substation to locate the major facilities away from residences if possible.

5. Terrain:
   To reduce the need for extensive grading of the site, a site with a relatively flat terrain is preferred.

6. Larger parcel (greater than 40 acres):
A minimum of 15 acres is required to accommodate the size of the substation and to provide a small buffer area. We would prefer to have at least 20 acres for the substation. A site that is at least 40 acres would be better and we would be willing to purchase a larger site to provide a larger buffer. Other factors that support a larger substation site include:

a. To provide adequate space to site the substation away from nearby residences.
b. To allow Xcel Energy to develop a vegetative screen from residences.
c. To help accommodate additional transmission and wind feeder lines that will be entering substation.
d. To buffer the property from wind development. Some of our existing substations (such as Chanarambie and Buffalo Ridge) have had considerable wind turbine development around them, which can limit the ability to route transmission lines into the substation.

7. Avoid wetlands and wildlife areas:
Wetlands are avoided to minimize environmental impacts. Additionally, siting away from wetlands avoids the significant related costs of filling and mitigating impacts.

8. Site Near Wind Farm Projects to Maximize Wind Interconnection Opportunities and Minimize Interconnection Costs:
The Nobles County Substation has always been planned to have a section for 34.5 kV feeders to accommodate interconnections with wind energy turbines. We were requested by planning to site the substation near the Reading/Wilmont area, just north of Worthington, to keep the substation close to where the Split Rock-Lakefield Junction 345 kV line crosses the Buffalo Ridge landform.

The Nobles to Chanarambie 115 kV line needs to stay relatively near to the Buffalo Ridge to accommodate additional substation interconnects that will be required.

The Fenton substation siting will move forward later this summer once contracts with wind farm developers in this area are signed. A general site has been identified along segments W5 and E4, in the vicinity where the existing Xcel Energy 69 kV line heads west along 31st street. No major siting efforts or discussions with landowners have occurred.

The Community Wind South Project has decided to tie into the Nobles County sub and is basing its plans on the proposed sites we have provided. The project picked its site partly based on the proposed substation sites in Xcel Energy's

application. Moving the substation site would increase the cost and length of 34.5 kV feeders to tie their wind generators into the system.

9. Availability of nearby corridors or routes for potential future high-voltage transmission line interconnections:
   Since this will be a major substation, it should be expected that additional transmission lines would tie into the substation. The layout of the substation already has locations for the Heron Lake to Split Rock 161 kV line to connect in the future. We would also like ample space surrounding the substation for 34.5 kV wind feeder lines to enter the substation. It is uncertain what will be proposed, but it is reasonable to assume that additional 345 kV transmission lines will be considered. At this time we would expect that such lines would go north towards the Twin Cities area or south towards Iowa. The main way to address this issue now is to acquire adequate land for the substation and buffer and to give consideration to these anticipated future lines when siting the transmission lines requested in this docket. .

10. Willing seller:
    Xcel Energy would prefer to have a willing seller. Several landowners interested in selling land for the substation site have approached us. At this time, Xcel Energy would prefer to have a general area identified for the substation and work through the specific site location with the landowner. We may get more specific as the project moves forward.

7/13/04
Xcel Energy